Communicable Disease Control Manual
Chapter 4: Tuberculosis

Appendix C: Collection of Specimens for TB Testing
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Appendix C: Collection of Specimens for TB Testing

Sputum Collection

Collect three sputum specimens for AFB smear and culture.

- Whether spontaneous or induced, specimens may be collected on the same day, at least 1 hour apart. Ideally 1 specimen will be collected in the morning, prior to eating or drinking.
- Sputum may also be collected daily, for 3 days in a row (ideally in the morning).
- Use the PHSA Mycobacteriology/TB Requisition forms and ensure TB Services is included in the “Additional Copies to Practitioner/Clinic” section.

Consultation

Contact the TB Nurse Consultants for discussion of specific TB laboratory tests, results regarding sputum specimen collection or guidance on the management of clients who are unable to spontaneously produce sputum (e.g., frail elderly, young children). For more information on sputum induction, refer to Appendix D.

Requirements for Collection

- **Submit all specimens** in sterile, screw-cap leak-proof containers. Ensure that the specimen container is tightly closed. Do not use caps containing cardboard liners, as they will soak up the specimen. Label specimen containers legibly.
  - Leaking specimens are not processed.
- **Submit one specimen container per biohazard bag**.
  - Each bag must contain a requisition in the side pocket that includes two patient identifiers (e.g., full name, date of birth) identical to the patient information on the specimen container.
  - If possible, provide a brief summary of patient history and findings on the laboratory requisition. This information may be important for the assessment of significance of nontuberculous mycobacteria (NTM) isolates.
- **Do NOT** submit specimens for mycobacterial culture in alcohol, formalin, or other preservatives.
- Submit specimens for stomach/gastric lavages in a TB treated glass jar in a sealable biohazard bag. Request prepared jars 2 weeks in advance. Access the sample container order form [here](#).
- Body fluids that are bloody (e.g. pleural, pericardial, peritoneal) should be submitted in containers with anticoagulant and the anticoagulant should be SPS, but Sodium citrate or Heparin is acceptable. Do not use EDTA, as it inhibits the growth of mycobacteria.
- When sending specimens for histopathology examination, at least one additional specimen should be collected/submitted appropriately for mycobacterial culture (i.e., not submitted in alcohol, formalin, or other preservatives).
- Refrigerate (at 4°C) gastric lavage fluid, lymph node or other tissue biopsy samples, sputum or urine specimens before and during transport to the laboratory. **Exceptions:** blood culture and cerebrospinal fluid specimens.
- Specimens or samples suspected of containing *Mycobacterium tuberculosis* must be transported as Category B, Type P650 packaging. Refer to regulations for [Transport of Dangerous Goods](#).
Client Education

Resources:

- Video: "How to get a good sputum sample for your tuberculosis test". Also available in seven other subtitled languages on the BCCDC’s YouTube channel.
- HealthlinkBC Healthfiles: Sputum Testing for TB.

BCCDC Public Health Laboratory

The eLab Handbook provides:

- PHSA Mycobacteriology/TB Requisition forms
- Quick Tips
- Before You Collect considerations
- Processing information
- Specimen Requirements (e.g. Directions for collection)
- Transport guidance
- Questions: Contact the BCCDC Public Health Laboratory (BCCDC PHL) Mycobacteriology/TB laboratory at 604-707-2630.
Accessing the eLab Handbook

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<th>Field</th>
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<td>Select “BCCDC Public Health Laboratory” from drop-down menu</td>
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<td>2</td>
<td>Search For Test</td>
<td>Type “mycobacterium” and select “Go”</td>
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<tr>
<td>3</td>
<td>Test Name</td>
<td>Choose appropriate test from records returned</td>
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